

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method for routing packets in a network in conjunction with a quality of service guarantee, comprising:

receiving a packet having a header section and a payload section;

inspecting the payload section of the packet in a network core for use in determining how to route the packet;

determining a quality of service guarantee for the packet; and

selectively routing the packet based upon the inspecting and the quality of service guarantee.

Claim 2 (original): The method of claim 1 wherein the inspecting step includes determining whether information in the payload section matches content predicate information in a structure associating the content predicate information with corresponding network destinations.

Claim 3 (original): The method of claim 1, further including performing the inspecting step at a router in the network core.

Claim 4 (original): The method of claim 1 wherein the inspecting step includes matching a filter to information in the payload section.

Claim 5 (original) The method of claim 4, further including propagating the filter to a router in the network for use in performing the inspecting.

Claim 6 (original) The method of claim 1, further including programming a router in the network for performing the receiving, inspecting, and routing steps.

Claim 7 (original) The method of claim 1 wherein the inspecting step includes inspecting attributes for use in determining how to route the packet or whether to drop the packet altogether.

Claim 8 (original) A method for routing messages in a network, comprising:

receiving a message having a header section, at least one subject, and at least one attribute;

retrieving the subject and the attribute from the message;

retrieving a subscription based upon the subject;

determining a quality of service guarantee for the message;

applying the attribute to the subscription in a network core in order to determine how to route the message; and

selectively routing the message based upon the applying and the quality of service guarantee.

Claim 9 (original) The method of claim 8 wherein the retrieving the subscription step includes retrieving a filter corresponding with the subscription.

Claim 10 (original) The method of claim 8, further including routing the message if the attribute satisfies the subscription.

Claim 11 (original) The method of claim 8, further including discarding the message if the attribute does not satisfy the subscription.

Claim 12 (original) The method of claim 8, further including:

retrieving a plurality of filters corresponding with a plurality of subscriptions;

retrieving a plurality of attributes from the message;

matching each of the attributes to each of the filters to determine if any of the corresponding subscriptions are satisfied; and

selectively routing the message based upon whether any of the subscriptions are satisfied.

Claim 13 (original) The method of claim 8, further including performing the inspecting step at a router in the network core.

Claim 14 (original) An apparatus for routing packets in a network in conjunction with a quality of service guarantee, comprising:

a module for receiving a packet having a header section and a payload section;

at least one module for inspecting the payload section of the packet in a network core for use in determining how to route the packet;

a module for determining a quality of service guarantee for the packet; and

a module for selectively routing the packet based upon the inspection results obtained from and the quality-of-service guarantees determined by the steps above.

Claim 15 (original) The apparatus of claim 14 wherein the inspecting module includes a module for determining whether information in the payload section matches content predicate information in a structure associating the content predicate information with corresponding network destinations or corresponding rules governing in-router processing.

Claim 16 (original) The apparatus of claim 14, further including a module for performing the inspecting step at a router in the network core.

Claim 17 (original) The apparatus of claim 14 wherein the inspecting module includes a module for matching a filter to information in the payload section.

Claim 18 (original) The apparatus of claim 17, further including a module for propagating the filter to a router in the network for use in performing the inspecting.

Claim 19 (original) The apparatus of claim 14, further including a module for programming a router in the network for performing the receiving, inspecting, and processing.

Claim 20 (original) The apparatus of claim 14, wherein the apparatus is a router.

Claim 21 (currently amended): An apparatus for routing messages in a network, comprising:

a module for receiving a message having a header section, at least one subject, and at least one attribute;

a module for retrieving the subject and the attribute from the message;

a module for retrieving a subscription based upon the subject, wherein the module for retrieving the subscription includes a module for retrieving a filter corresponding with the subscription;

a module for matching the attribute to the subscription in a network core in order to determine how to route the message; and

a module for determining a quality of service guarantee for the packet.

Claim 22 (canceled).

Claim 23 (original) The apparatus of claim 21, further including a module for selective routing the message if the attribute satisfies the subscription and based on the quality of service guarantee.

Claim 24 (original) The apparatus of claim 21, further including a module for discarding the message if the attribute does not satisfy any of the subscriptions stored at the router.

Claim 25 (original) The apparatus of claim 21, further including:

- a module for retrieving a plurality of filters corresponding with a plurality of subscriptions;

- a module for retrieving a plurality of attributes from the message;

- a filtering module for matching each of the attributes to each of the filters to determine if any of the corresponding subscriptions are satisfied; and

- a module for selectively routing the message based upon whether any of the subscriptions are satisfied.

Claim 26 (original) The apparatus of claim 21, further including one or more modules for performing the filtering step at a router in the network core.

Claim 27 (original) The apparatus of claim 21, wherein the apparatus is a router.